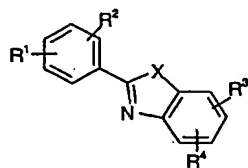


CLAIMS:

1. A compound of formula (I) or a pharmaceutically acceptable salt or prodrug thereof:

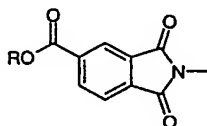


(I)

wherein

X is O or S;

R¹ is a phthalimide carboxylic acid group of formula (II):



(II)

R is hydrogen, C₁-C₆ alkyl, aryl or C₁-C₃ alkylaryl;

R² is hydrogen, halogen, C₁-C₆ alkyl, OR⁵, a 5-membered heteroaryl ring or NR⁵R⁵ wherein the R⁵ substituents together with the nitrogen to which they are attached may form a 5- or 6-membered ring which may contain an additional heteroatom selected from O, S, and NR¹⁰;

R³ and R⁴ are independently hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, NHCOR⁷, NHSO₂R⁹, CN, S(O)_pR⁹, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy; or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl; or R³ and R⁴ together may form a fused phenyl ring or a -O-(CH₂)_x-O- group, wherein x is 1 or 2;

R⁵ is independently hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy, NR⁷R⁸, phenyl or a 5- or 6-membered heteroaryl ring, wherein phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl;

R⁶ is C₁-C₆ alkyl, OR⁵, NR⁷R⁸ or phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR¹⁰, CN, CHO, OCHF₂, NR⁷R⁸, NHCOR⁷, NHSO₂R⁹, S(O)_pR⁹ and methylenedioxy;

R⁷ and R⁸ are independently hydrogen, phenyl, a 5- to 10-membered heterocyclic ring, C₁-C₆ alkoxy, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein in each case, the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl;

or R⁷ and R⁸ together with the nitrogen to which they are attached may form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONR¹⁰R¹⁰ and may optionally contain an additional heteroatom selected from O, S and NR¹¹;

R⁹ is C₁-C₆ alkyl or phenyl optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy;

R¹⁰ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy;

R¹¹ is hydrogen, phenyl or C₁-C₃ alkyl optionally substituted by phenyl, wherein in each case the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy; and

p is 0, 1 or 2;

- 5 provided that the compound is not 2-[4-(5-carboxy-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)phenyl]-6-benzothiazolecarboxylic acid.

2. A compound according to claim 1 wherein X is O.

- 10 3. A compound according to claim 1 or 2 wherein R¹ is meta to the benzoxazole or benzothiazole group.

4. A compound according to any one of the preceding claims wherein R² is hydrogen, OR⁵ or NR⁵R⁵.

- 15 5. A compound according to any one of the preceding claims wherein R³ is hydrogen or halogen.

6. A compound according to any one of the preceding claims wherein R⁴ is hydrogen, halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR¹⁰, COR⁶, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂ and NR⁷R⁸; or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl; or R³ and R⁴ together may form a fused phenyl ring.

25 7. A compound according to any one of the preceding claims wherein R⁴ is COR⁶, phenyl optionally substituted by one or more substituents selected from halogen, C₁-C₆ alkyl optionally substituted by hydroxy or C₁-C₃ alkoxy, CF₃, OCF₃, OR⁵, COR⁶, CN, CHO, OCHF₂ and NR⁷R⁸; or a 5- to 10-membered heteroaryl ring which is optionally substituted by C₁-C₆ alkyl.

30 8. A compound according to any one of the preceding claims wherein R⁵ is hydrogen, C₃-C₆ alkenyl, C₃-C₆ alkynyl, or C₁-C₆ alkyl optionally substituted by hydroxy, C₁-C₃ alkoxy or a 5- or 6-membered heteroaryl ring, wherein the heteroaryl ring is optionally substituted by C₁-C₆ alkyl.

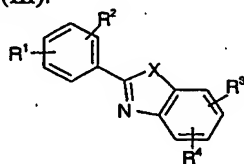
35 9. A compound according to any one of the preceding claims wherein R⁶ is C₁-C₆ alkyl, OR⁵ or NR⁷R⁸.

10. A compound according to any one of the preceding claims wherein R⁶ is OR⁵ or NR⁷R⁸.

40 11. A compound according to any one of the preceding claims wherein R⁷ and R⁸ are independently hydrogen, or C₁-C₆ alkyl optionally substituted by phenyl or a 5- to 10-membered heterocyclic ring, wherein the phenyl is optionally substituted by one or more substituents selected from halogen, CF₃, OCF₃, CHO, OR¹⁰, COR¹⁰, R¹⁰, CN and methylenedioxy and the heterocyclic ring is optionally substituted by C₁-C₆ alkyl; or still preferably R⁷ and R⁸ together with the nitrogen to which they are attached may form a 5- or 6-membered heterocyclic ring which is optionally substituted by CONH₂ and may optionally contain an additional heteroatom selected from O, S and NR¹¹.

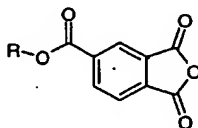
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12. A compound according to any one of the preceding claims wherein R^9 is C_1-C_6 alkyl.
13. A compound of formula (I) as described in any one of Examples 1 to 118 or a pharmaceutically acceptable salt or prodrug thereof.
14. A compound as defined in any one of claims 1 to 13, but without the proviso, for use in medicine.
15. A process for the preparation of a compound as defined in any one of claims 1 to 13 which comprises:
- 10 a) treating a compound of formula (III):



(III)

wherein R^1 is NH_2 or a protected derivative thereof and X, R^2 , R^3 and R^4 are as defined in claim 1, with a compound of formula (IV):



(IV)

wherein R is as defined in claim 1, by i) heating in a suitable acidic medium, or
ii) heating a compound of formula (III) with a compound of formula (IV) with an organic base in a suitable solvent, followed by heating in a suitable acidic medium.

16. A pharmaceutical composition comprising a compound according to any one of claims 1 to 13, but without the proviso, together with a pharmaceutically acceptable carrier, excipient and/or diluent.
17. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of an inhibitor of heparanase.
18. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of a medicament for the treatment of cancer.
19. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of a medicament for the treatment of angiogenesis or angiogenesis-related disorders.
20. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of a medicament for the treatment of inflammatory diseases or autoimmune disorders.
21. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of a medicament for the treatment of cardiovascular diseases.
22. The use of a compound as defined in any one of claims 1 to 13, but without the proviso, in the manufacture of a medicament for the treatment of renal disorders.